# abcam

# Product datasheet

# Recombinant Human Smad2 protein ab85329

# 1 图像

#### 描述

产品名称 重组人Smad2蛋白

纯**度** > 95 % SDS-PAGE.

ab85329 was purified using conventional chromatography techniques.

**内毒素水平** < 1.000 Eu/µg

表达系统 Escherichia coli

Accession Q15796

**蛋白长度** Full length protein

无动物成分 No

性质 Recombinant

**种属** Human

序列 MGSSHHHHHH SSGLVPRGSH MSSILPFTPP

VVKRLLGWKK SAGGSGGAGG GEQNGQEEKW CEKAVKSLVK KLKKTGRLDE LEKAITTQNC

NTKCVTIPSTCSEIWGLSTP NTIDQWDTTG LYSFSEQTRS

LDGRLQVSHR KGLPHVIYCR LWRWPDLHSH HELKAIENCE YAFNLKKDEV CVNPYHYQRV

ETPVLPPVLVPRHTEILTEL PPLDDYTHSI PENTNFPAGI

EPQSNYIPET PPPGYISEDG ETSDQQLNQS MDTGSPAELS PTTLSPVNHS LDLQPVTYSE

PAFWCSIAYYELNQRVGETF HASQPSLTVD GFTDPSNSER

FCLGLLSNVN RNATVEMTRR HIGRGVRLYY IGGEVFAECL SDSAIFVQSP NCNQRYGWHP

ATVCKIPPGCNLKIFNNQEF AALLAQSVNQ GFEAVYQLTR

MCTIRMSFVK GWGAEYRRQT VTSTPCWIEL HLNGPLQWLD KVLTQMGSPS VRCSSMS

预**测分子量** 54 kDa **氨基酸** 1 to 467

#### 技术指标

Our **Abpromise guarantee** covers the use of **ab85329** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

应用 SDS-PAGE

形式 Liquid

#### 制备和贮存

稳定性和存储 Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw

cycles.

pH: 8.00

Constituents: 0.316% Tris HCl, 0.58% Sodium chloride

#### 常规信息

功能 Receptor-regulated SMAD (R-SMAD) that is an intracellular signal transducer and transcriptional

modulator activated by TGF-beta (transforming growth factor) and activin type 1 receptor kinases. Binds the TRE element in the promoter region of many genes that are regulated by TGF-beta and, on formation of the SMAD2/SMAD4 complex, activates transcription. May act as a tumor

suppressor in colorectal carcinoma.

组织特异性 Expressed at high levels in skeletal muscle, heart and placenta.

序列相似性 Belongs to the dwarfin/SMAD family.

Contains 1 MH1 (MAD homology 1) domain. Contains 1 MH2 (MAD homology 2) domain.

翻译后修饰 Phosphorylated on one or several of Thr-220, Ser-245, Ser-250, and Ser-255. In response to

TGF-beta, phosphorylated on Ser-465/467 by TGF-beta and activin type 1 receptor kinases. Able to interact with SMURF2 when phosphorylated on Ser-465/467, recruiting other proteins, such as SNON, for degradation. In response to decorin, the naturally occurring inhibitor of TGF-beta signaling, phosphorylated on Ser-240 by CaMK2. Phosphorylated by MAPK3 upon EGF stimulation; which increases transcriptional activity and stability, and is blocked by calmodulin. In response to TGF-beta, ubiquitinated by NEDD41; which promotes its degradation

In response to TGF-beta, ubiquitinated by NEDD4L; which promotes its degradation. Acetylated on Lys-19 by coactivators in response to TGF-beta signaling, which increases transcriptional activity. Isoform short: Acetylation increases DNA binding activity in vitro and enhances its association with target promoters in vivo. Acetylation in the nucleus by EP300 is

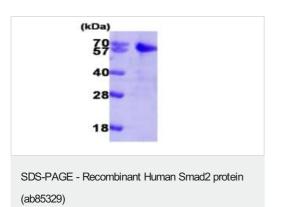
enhanced by TGF-beta.

细胞定位 Cytoplasm. Nucleus. Cytoplasmic and nuclear in the absence of TGF-beta. On TGF-beta

stimulation, migrates to the nucleus when complexed with SMAD4. On dephosphorylation by phosphatase PPM1A, released from the SMAD2/SMAD4 complex, and exported out of the

nucleus by interaction with RANBP1.

# 图片



15% SDS-PAGE analysis of 3µg ab85329

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

### Our Abpromise to you: Quality guaranteed and expert technical support

- · Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- · Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- · We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.cn/abpromise">https://www.abcam.cn/abpromise</a> or contact our technical team.

#### Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors